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| **COURSE Code:** | OPM 460 |
| **Module Title:** | Data visualisation and analytics  |
| **Distributed on:** |  | **Hand in Date:** |  |

**Instructions for the Assessment of this module:**

Summative Assessment

You will be summatively assessed by a **group project report** and **presentation** on your **survey** on turnitin link of Moodle along with the physical presentation. **Each** student in the group has to conduct survey of atleast **5** companies. A group will not exceed more than 5 member. Choice of the group is left to each individual. Template and design of the survey will be given to you.

As a group you are expected to submit a **report** and **presentation** at the end of this project. Following will be the key parts of them

**An executive summary:**

Overall discussion about the project in brief with results along with recommendations

**An introduction to the project and research objectives:**

Defining the scope and aims of the project along with the key steps

**Data collection process**

Explaining the process of data collection and challenges

**Data analysis**

Analysing data applying tools and techniques in the class

**A discussion of issues**

In depth discussion of data analysis challenges

**Presentation and analysis of findings**

A Clear evidence of findings in the form of graphs, tables and charts along with written analysis

**Study conclusions**

A concise conclusion with relevance to the findings

**Recommendations**

Future direction of research and its implications

**Reflective Report**

Reflective account of your understanding about the project and suggestions

**Structure, Layout and Academic Practice**

Following the academic layout in terms of structure, sign posting and language

In addition to the above consider following instructions while you create both report and presentation.

1. There has to be a clear evidence of **systematic data collection** from the project
2. Adequate understanding has to be shown to upload, filter, process and manipulate data
3. Certain **data processing** procedure should be shown like entering data, coding data, inserting missing data values, defining data types etc..
4. Key **statistical concepts** should be applied on the data i.e. frequencies, cross tabulations, descriptive statistics
5. **Graphical presentation** of data analysis and processing to support story telling
6. **Key inferences** has to be drawn from the data and supported by the evidence
7. A **reflective account** has to be visible in the report which should be linked with the presentation
8. Work load within group members should be distributed **evenly** and each member will be answerable of his/her own account of work.
9. Contribution of each member should be clearly marked in the **presentation** to achieve corresponding grade
10. Communication skills both **verbal** and **written** will also be assessed along with data analytics skills in this project

The will include the following elements:

An executive summary 10% of overall report mark

An introduction to the project and research objectives 5% of the overall report mark

A Data collection process 10% of the overall report mark

A data analysis 15% of the overall report mark

A discussion of issues 10% of the overall report mark

Presentation and analysis of findings 20% of the overall report mark (not in word count)

Study conclusions 10% of the overall report mark

Recommendations 10% of the overall report mark (not in word count)

Reflective Report 5% of the overall report mark (not in word count)

Structure, Layout and Academic Practice 5% of the overall report mark

Your answers should consider appropriate and relevant theories, models and concepts which demonstrate wider reading and which are appropriately cited.

Students are advised that they may be asked to submit an electronic version of their assignment and so should retain an electronic version of the assignment.

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| Trait | Less than 30% Clear Fail | 30-39%Fail | 40-49 hardly Adequate | 50-59 boderline | 60-69 Pass Very Good | 70-79 Excellent | 80-89 Outstanding | 90-100 Exemplary |
|  Presentation, Structure and Academic Practice -  | Standard not met 1 Completely insufficient structure. There are significant spelling, grammatical and typographical errors with the layout not conforming to the specified guidelines. | Standard not met 2 Insufficient structure. There are significant spelling, grammatical and typographical errors with the layout not conforming to the specified guidelines. | Standard met 1 Adequate / basic structure. Generally free from spelling, grammatical or typographical errors. The layout and format is generally consistent with guidelines. | Standard met 2 A good structure. Mostly free from spelling, grammatical or typographical errors. The layout and format is mostly consistent with guidelines. | Standard met 3 Very Good structure. Free from spelling, grammatical or typographical errors. The layout and format is consistent with guidelines. | Standard met 1 Excellent structure. Free from spelling, grammatical or typographical errors. The layout and format is consistent with guidelines. | Standard met 2 Outstanding structure. Free from spelling, grammatical or typographical errors. The layout and format is consistent with guidelines. | Standard met 3 Exemplary structure. Free from spelling, grammatical or typographical errors. The layout and format is consistent with guidelines. |
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| Executive Summary - Completion of an executive summary -  | Completely insufficient executive summary. The executive summary is missing or inadequate with key sections missing.  | Insufficient executive summary. An adequate executive summary but key information is missing.  | Adequate / basic executive summary. A sound executive summary which includes most essential information, but may give greater precedence to some elements over others.  | A good executive summary which includes all essential information.  | A very good executive summary including all relevant information to a very good standard.  | Excellent executive summary including all relevant information to an extremely high standard.  | Outstanding executive summary including all relevant information to an extremely high standard.  | Exemplary executive summary including all relevant information to an extremely high standard.  |
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| Introduction - Introduction to the research.Clear research objectives are presented. -  | Completely insufficient introduction.The business and management focus is not made sufficiently clear with a lack of rationale for the study. Research question and objectives are inappropriate. | Insufficient introduction. Research question and some objectives are outlined but require further development to ensure they are bound and specific. | Adequate / basic introduction. There is an explanation of the purpose of the research within a business and management context, however this requires greater discussion. Research question and objectives stated but require development to be made more specific | A good introduction. A good explanation of the purpose of the research within a business and management context. Clear research question and objectives but could be developed further. | Very Good introduction. A thoroughdiscussion of the rationale for the study which is focused and within a leadership, business and management context.Very good, clearly defined research question and objectives… | Excellent introduction. Excellentdiscussion of the rationale for the study which is focused and within a business and management context.Excellent, clearly defined research question and objectives. | Outstanding introduction. Outstandingdiscussion of the rationale for the study which is focused and within a business and management context.Outstanding clearly defined research question and objectives. | Exemplary introduction. Exemplarydiscussion of the rationale for the study which is focused and within a business and management context.Exemplary clearly defined research question and objectives. |
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|  Discussion and justification of appropriate research strategy and data collectionmethods. - | Completely insufficient discussion on research strategy and methods. There is no discussion on research strategies, research methods or data analysis. The practical details of the research study are missing. | Insufficient discussion on research strategy and methods. There is a significant lack of discussion focusing on research strategies and research methods. The practical detail of the research is limited and there is no acknowledgement of data analysis tools. | Adequate / basic discussion on research strategy and methods.An adequate discussion of research strategies, however, some elements of the discussion; demonstrating awareness of different types, justifying selection and acknowledging the limitations of the chosen strategy, require further work. An adequate discussion of research methods, however, some elements of the discussion; demonstrating awareness of the different types, justifying selection and recognizing the potential limitations may be missing or underdeveloped. Identification of data analysis tools is underdeveloped or not appropriate. Limited discussion of the practical details of the data collection process is evident and requires further work.  | A good discussion on research strategy and methods.A sound discussion of research strategies, however, some elements of the discussion; demonstrating awareness of different types, justifying selection and acknowledging the limitations of the chosen strategy focusing, may be missing or underdeveloped. A sound discussion of research methods, however, some elements of the discussion; demonstrating awareness of the different types, justifying selection and recognizing the potential limitations are underdeveloped. Identification of appropriate data analysis tools are either incorrect or missing a discussion. Some elements of the practical details of the conduct of the research is evident, however, some elements are missing.  | Very Good discussion on research strategy and methods.A very good discussion of research strategies demonstrating awareness of the different types, justifying selection and acknowledging the limitations of the chosen strategy. A very good discussion of research methods demonstrating awareness of the different types, justifying selection and recognising the potential limitations. Appropriate data analysis tools are identified and explained. A clear explanation of the practical details of the conduct of the research. | Excellent discussion on research strategy and methods.An excellent discussion of research strategies demonstrating awareness of the different types, justifying selection and acknowledging the limitations of the chosen strategy. An excellent discussion of research methods demonstrating awareness of the different types, justifying selection and recognising the potential limitations. Excellent identification of data analysis tools which are explained and acknowledge the limitations. A detailed explanation of the practical details of the conduct of the research.  | Outstanding discussion on research strategy and methods. Outstanding discussion of research strategies demonstrating awareness of the different types, justifying selection and acknowledging the limitations of the chosen strategy. Outstanding discussion of research methods demonstrating awareness of the different types, justifying selection and recognising the potential limitations. Outstanding identification of data analysis tools which are thoroughly explained acknowledging limitations with an attempt to manage them within the study. Thorough explanation of the practical details of the conduct of the research.  | Exemplary discussion on research strategy and methods.Exemplary discussion of research strategies demonstrating awareness of the different types, justifying selection and acknowledging the limitations of the chosen strategy. Exemplary discussion of research methods demonstrating awareness of the different types, justifying selection and recognising the potential limitations. Exemplary identification of data analysis tools which are thoroughly explained acknowledging limitations with an attempt to manage them within the study. Thorough explanation of the practical details of the conduct of the research.  |
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| Demonstrate an understanding of the ethical issues for leaders and/or managers and professional practice. - | Completely insufficient understanding of the ethical issues.There is no discussion of research ethics. There is also no consideration of organisational and/or individual consent and the approaches taken to ensure this research is undertaken in an ethical manner. | Insufficient understanding of the ethical issues.There is a significant lack of discussion relating to research ethics and the practical detail of ethical implications is brief. | Adequate / basic understanding of the ethical issues. Limited discussion research ethics and whilst the ethical issues are highlighted, there is only limited discussion of the personal and organizational implications for the study.  | A good understanding of the ethical issues. Research ethics and the ethical issues are recognised with an attempt to discuss the implications for the study from both a personal and organizational perspective (where appropriate).  | Very Good understanding of the ethical issues. Research ethics are discussed from a theoretical perspective well and the ethical issues are recognised with a detailed attempt to discuss the implications for the study from both a personal and organizational perspective (where appropriate).  | Excellent understanding of the ethical issues. Research ethics are discussed from a theoretical perspective well. There is a thorough explanation of the practical details of the conduct of the research with an excellent appreciation of the ethical issues from both a personal and organizational perspective (where appropriate). | Outstanding understanding of the ethical issues.Research ethics are discussed from a theoretical perspective well. There is a thorough explanation of the practical details of the conduct of the research with an outstanding appreciation of the ethical issues from both a personal and organizational perspective (where appropriate). | Exemplary understanding of the ethical issues. Research ethics are discussed from a theoretical perspective well. There is a thorough explanation of the practical details of the conduct of the research with an exemplary appreciation of the ethical issues from both a personal and organizational perspective (where appropriate). |
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| Present and analyse findings of contemporary research into Business, Management or Leadership Issues. - | Completely insufficient/ no data presented. No inferences are drawn and no theoretical links made. | Insufficient data presentation. Only a few inferences are drawn from the data and those which are, are poor. No theoretical links are drawn upon when discussing the data. | Adequate / basic data presentation. Inferences drawn from the data are limited. Very few theoretical links are drawn upon when discussing the data.  | A good data presentation. Inferences are drawn from the data. Few theoretical links drawn upon when discussing the data. | Very Good presentation of data. Very good inferences are drawn from the data. Some relevant theory is drawn upon when discussing the data.  | Excellent presentation of data. Excellent inferences are drawn from the data. Relevant theory is drawn upon when discussing the data providing a very detailed discussion of the findings.  | Outstanding presentation of data. Outstanding inferences drawn from the data. Relevant theory is drawn upon to develop a mature discussion of the findings.  | Exemplary presentation of data. Exemplary inferences drawn from the data. Relevant theory is drawn upon to develop a mature discussion of the findings.  |
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| Conclusions - Conclusions and Future Research -  | Completely insufficient conclusions. No conclusions drawn. The need for further research is not acknowledged | Insufficient conclusions. Irrelevant or inappropriate conclusions drawn which are not supported by the data. The need for further research is not acknowledged | Adequate / basic conclusions. Some adequate conclusions are drawn from the analysis and supported by data, however, greater transparency and discussion required to develop this section further. Conclusions are somewhat relevant to the literature reviewed and attempt to address the research question, however, requires further development. The need for further research is acknowledged. | Good conclusions. Some sound conclusions drawn from the analysis and supported by data but this could be strengthened. Conclusions are relevant to the literature reviewed and go some way to address the research question. The need for further research is highlighted but not discussed in detail. | Very Good conclusions. Very good conclusions drawn from the analysis and supported by data. Conclusions are relevant to the literature reviewed and address the research question. The need for further research is outlined. | Excellent conclusions. Excellent conclusions drawn from the analysis and supported by data. Conclusions are very relevant to the literature reviewed and address the research question. The need for further research is identified with some supporting analysis. | Outstanding conclusions. Outstanding conclusions drawn from the analysis and supported by data. Conclusions are extremely relevant to the literature reviewed and clearly address the research question. The need for further research is identified and critically analysed.  | Exemplary conclusions. Exemplary conclusions drawn from the analysis and supported by data. Conclusions are extremely relevant to the literature reviewed and clearly address the research question. The need for further research is identified and critically analysed.  |
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| Recommendations - Practical recommendations based on the outcomes of this study - 10%  | Completely insufficient recommendations. Either no recommendations made or those which are made are Irrelevant or inappropriate which are not supported by the literature or data. | Insufficient recommendations. Some adequate recommendations are drawn although could be better aligned to the literature, analysis, conclusions and research question. | Adequate / basic recommendations. Some sound practical recommendations drawn from the literature, analysis and conclusions, although could be more detailed and/or aligned to the research question. | Good recommendations. Good practical recommendations drawn from the analysis and conclusions. They are relevant to the literature reviewed and clearly address the research question although could be more detailed.  | Very Good recommendations. Very good practical recommendations drawn from the analysis and conclusions. They are extremely relevant to the literature reviewed and clearly address the research question.  | Excellent recommendations. Excellent practical recommendations drawn from the analysis and conclusions. They are extremely relevant to the literature reviewed and clearly address the research question. | Outstanding recommendations. Outstanding practical recommendations drawn from the analysis and conclusions. They are extremely relevant to the literature reviewed and clearly address the research question. | Exemplary recommendations. Exemplary practical recommendations drawn from the analysis and conclusions. They are extremely relevant to the literature reviewed and clearly address the research question. |
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|  Reflective Learning Statement - A reflective learning statement considering the impact of your learning throughout this programme both personally and professionally. - 10%  | Completely insufficient reflective learning statement. Reflective statement of learning is missing or very brief. | Insufficient reflective learning statement. Reflective statement of learning lacks significant discussion with no specific examples given. | Adequate / basic reflective learning statement. An adequate reflective statement of learning although there could be more detailed use of example, SWOT and PDP. | Good reflective learning statement. A sound reflective statement of learning analysing a range of experiences throughout the learning process. There could be more detailed use of example, SWOT and PDP. | Very Good reflective learning statement. A very good reflective statement of learning analysing a range of experiences throughout the learning process. Some very good use of example and a robust SWOT and PDP. | Excellent reflective learning statement. A excellent reflective statement of learning analysing a range of experiences throughout the learning process. Supported by a range of learning and organisational examples. A detailed SWOT and PDP. | Outstanding reflective learning statement. Outstanding reflective statement of learning analysing a range of experiences throughout the learning process. Supported by detailed learning and organisational examples. A detailed SWOT and PDP. | Exemplary reflective learning statement. Exemplary reflective statement of learning analysing a range of experiences throughout the learning process. Supported by detailed learning and organisational examples. A detailed SWOT and PDP. |
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**Tableau based grading rubric**

| **GRADING RUBRIC for Final Project** |
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| **Criteria** | **Wt** | **Score** | **10 - Outstanding** | **9 - Proficient** | **8 - Basic** | **7 (or lower) - Below**  |
| **OBJECTIVE** |
| **Completed assignment per requirements** | 20 |  | All portions of the assignment, including presentations, data preparation, and visualizations were attempted and submitted. |
| **Data used is appropriate and sufficient for the analysis** | 2 |  | The data set used is appropriate, correct, and sufficient to support the thesis of the analysis. | Data is appropriate but minor issues or changes may be needed for a proper analysis. | Data is related but not sufficient, or significant data issues prevent a clear reading of the results. | Data has little or no relation to the topic or errors will lead to incorrect conclusions. The analysis is unusable. |
| **Headers, directions, citations, and visual cues are given as guides to the user** | 2 |  | Clear direction is provided. Visual cues, tooltips, and citations are consistently and correctly employed to inform and guide. | Header, footers, and instructions are present, but visual cues may be missing or could be improved. | The user must self-discover functionality. Headers and footers may be missing. Difficult to know what to do. | The user has little or no indication of how to engage. Directions are missing on clear. Missing headers and footers for context and meaning. |
| **Basic visualization rules and best practices are consistently applied and demonstrated** | 2 |  | Chart types are suitable and best options for the analysis. All axes and text are treated appropriately. The application of color is correct and clearly conveys meaning.  | Chart types chosen are acceptable, but axes may be cluttered or have rotated text. Color choices communicate meaning but can be improved. | Charts incorrectly used for the purpose intended. Axes are difficult to read and detract from understanding. Color used in a distracting or unsuitable manner. | Difficult to understand what is intended with the chart and data. Color actively distracts and confuses. Chart junk dominates the visualization and the meaning is unreadable. |
| **The visualization allows the user to conduct the intended analysis** | 2 |  | The visualization facilitates quick cognition and leading to a fact-based conclusion or assertion. | Study is required to interpret the data and how it applies to the thesis of the analysis. | The visualization does not directly address the topic or relies on presentation support. | The visualization is completely inappropriate and cannot be used to conduct the intended analysis. |
| **SUBJECTIVE** |
| **Viz is clean, clear, concise, captivating (Shaffer 4Cs)** | 2 |  | The 4Cs are well represented; the visualization is clear, clean, concise, and captivating.  | Aspects of the 4Cs are apparent; opportunity exists for further enhancement. | Multiple aspects of the 4Cs are missing, or have not been well addressed in the visualization. | Significant or complete disregard for the guidance present in the 4Cs, resulting in a poor visualization. |
| **Attractiveness and attention to design and details of craft** | 2 |  | Font choices are conscious and consistent, proper grammar and spelling is used, and choice of position, size, and emphasis integrate elements into a visually appealing and engaging whole. | Visualization shows thought and planning, and most aspects work in harmony. May exhibit minor issues with spelling, alignment, or sizing mismatched with importance.  | Visualization appears sloppy and may be difficult to understand as a coherent whole. Multiple issues with spelling, font consistency, positioning, or other distracting characteristics. | Little or no apparent thought or given and visualization comes across as disorganized. May be visible through numerous spelling or grammar issues, poor alignment and positioning choices inappropriate font use, etc. |
| **The visualization is usable and actionable (Duell Rules)**  | 2 |  | The visualization is targeted to the audience, the story is evident, and the conclusion or action required is clearly apparent.  | There is a clear message or story conveyed, but the action or conclusion is not definitive. May require interpretation. | The visualization suggests some possibilities, but does not lead to clarity of understanding and therefore action is not possible. | No apparent message or relevancy to the user; no actions can nor should be taken based on the analysis. |
| **Quality, integrity, and impact of the findings and analysis** | 3 |  | The analysis shows a level of quality, integrity, and competency that makes the viz impactful, generating a high level of trust.  | The overall conclusions of the analysis seem to be sound, with support by anecdotes or additional evidence. | The analysis shows a trend or suggests a result, but is not trustworthy because of errors in process, omission, or scope. | The analysis appears to be poorly conducted, greatly compromising the integrity of some or all of the visualization. |
| **Overall effectiveness of communication and presentation** | 3 |  | The visualization (or presentation) is delivered in a convincing way that demonstrates confidence, competency, and thoroughness.  | Delivery provides a strong argument and is well supported; minor details should be vetted and affirmed. | The presentation and communication leaves concerns or lingering lack of clarity. Work required to review and confirm. | The communication and presentation results in confusion and low level of confidence in the analysis, requiring a significant or complete re-do. |